

December 21, 2004

Mr. Jack R. Strosnider
Director, Office of Nuclear Material
Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Dear Mr. Strosnider:

I am writing in response to your letter of October 27, 2004, regarding the Kaiser Aluminum Speciality Products site Tulsa, Oklahoma. The October 27 letter notified EPA that the Kaiser site would have triggered an NRC consultation with EPA in accordance with the 2002 Memorandum of Understanding (MOU) entitled: "[Consultation and Finality on Decommissioning and Decontamination of Contaminated Sites](#)" (OSWER No. 9295.8-06, signed by EPA on September 6, 2002, and NRC on October 9, 2002). This letter responds to the notification in accordance with Section V.D.1 of the MOU, when NRC requests EPA's consultation on a decommissioning plan or a license termination plan, EPA is obligated to provide written notification of its views within 90 days of NRC's notice.

The October 27 letter does not constitute a Level 1 consultation as specified in the MOU because a Site Decommissioning Management Plan (SDMP) Action Plan had already been issued for the site. NRC initiated the consultation on this site in the spirit of the MOU. EPA is providing its views in a manner equivalent to what we expect to provide for in future Level 1 consultations, similarly, in keeping with the spirit of the MOU.

The views expressed by EPA in this letter regarding NRC's decommissioning are limited to discussions related to the MOU. The comments provided here do not constitute guidance related to the cleanup of sites under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).¹ EPA's views on the matters addressed by this letter were developed from information furnished by NRC in the October 27 letter, other materials provided by NRC, and staff discussions.

¹Please see the memorandum entitled: "Distribution of Memorandum of Understanding between EPA and the Nuclear Regulatory Commission" (OSWER No. 9295.8-06a, October 9, 2002) which includes guidance to the EPA Regions to facilitate Regional compliance with the MOU and to clarify that the MOU does not affect CERCLA actions that do not involve NRC (e.g., the MOU does not establish cleanup levels for CERCLA sites). This memorandum may be found on the Internet at: <http://www.epa.gov/superfund/resources/radiation/pdf/transmou2fin.pdf>.

EPA Consultation Views

Today's response is limited to those matters that initiated NRC's request for consultation in its letter of October 27. NRC initiated this consultation because the derived concentration guideline levels (DCGLs) in the Site Decommissioning Management Plan (SDMP) Action Plan exceed the MOU trigger values for two radionuclides in soil. It is EPA's understanding that DCGLs are generally developed for all radionuclides that a licensee was permitted by NRC to use. It is also our understanding that many of these radionuclides may not be present in the media (soil) discussed in this letter, and that the remediation activities associated with NRC's decommissioning process are likely to significantly decrease below the DCGLs the residual levels of those radionuclides that are present.

Soil: Supplemental Standards

NRC triggered the consultation for soil on the basis of DCGLs for radium-226 and thorium-232 in the SDMP Action Plan exceeding the Table 1 values in the MOU. In Table 1, the 5 pCi/g soil concentrations for either radium-226 or thorium-232 are based on soil standards developed under the Uranium Mill Tailings Radiation Control Act (UMTRCA) and implementing regulations (40 C.F.R. 192). The UMTRCA standard is often identified as an Applicable or Relevant and Appropriate Requirement (ARAR) at CERCLA sites and to establish cleanup levels for radium-226 or thorium-232. 40 C.F.R. 192 also contains provisions for the establishment of "supplemental standards" under some special circumstances that allow the selection and performance of remedial actions that come as close as reasonably achievable to meeting the UMTRCA standards. Supplemental standards were designed:

- for situations in which worker safety would be adversely impacted or clearly greater environmental harm would result from the remedial action necessary to attain the standards,
- for situations in which the materials do not pose a clear present or future hazard and improvements could be achieved only at unreasonably high cost, or
- where concentrations of other radionuclides are sufficiently high to constitute a significant radiation hazard.

If supplemental standards are used for the remediation of soil, EPA will generally include institutional controls as a component of the cleanup alternative to ensure the response will be protective over time. For further information regarding how EPA selects institutional controls, see "Institutional Controls: A Site Manager's Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups" (OSWER Directive 9355.0-74FS-P, September 2000). This guidance document may be found on the Internet at: <http://www.epa.gov/superfund/action/ic/guide/guide.pdf>. For further information regarding how EPA interprets the soil standards of 40 C.F.R. 192 as a potential ARAR, see the "Use of Soil Cleanup Criteria in 40 CFR Part 192 as Remediation Goals for CERCLA sites" (OSWER Directive 9200.4-25, February 12, 1998). This guidance document may be found on the Internet at: <http://www.epa.gov/superfund/resources/radiation/pdf/umtrcagu.pdf>.

In EPA's view, if NRC is unable to meet the 5 pCi/g Table 1 value for thorium-232 and radium-226, NRC should consider the use of supplemental standards. The use of supplemental standards would not alter NRC's obligation to possibly trigger a future Level 2 consultation, if Table 1 soil values were found to be exceeded after the Final Status Survey (FSS). However, during a potential Level 2 consultation, if NRC is able to furnish a supplemental standard, their rationale for allowing its use, and the residual concentrations and land use for the site, such information may facilitate EPA offering its views on the NRC decommissioning approach.

Conclusion

EPA staff will remain available to NRC for consultation as further plans are developed for needed remediation at the site. If you have any questions regarding this letter, please contact Stuart Walker of my staff at (703) 603-8748.

Sincerely,

/s/ mbc

Michael B. Cook, Director
Office of Superfund Remediation
and Technology Innovation